

PREFACE

The development of machine tools has been accompanied by a corresponding development of auxiliary equipment for increasing the quantity and improving the quality of the products of these machines. Whenever duplicate parts require some operation such as drilling, planing, or milling, the selection of a suitable type of machine is often followed by the design of whatever special tools or attachments are needed to adapt the machine to the operation required. The tool-guiding and work-holding jigs and fixtures which are now used in practically all machine shops represent the most important class of special equipment, and this book deals exclusively with their design and construction.

As most jigs are used for drilling operations, a book was previously published entitled "Drilling Practice and Jig Design," covering different types of drilling machines and their

use, the design of drill jigs, and, to some extent, the design of

fixtures such, for example, as are used on milling machines.

While the subjects of drilling and jig design are closely allied,

⁴ it is no longer possible to cover them both in a single volume,

N owing to the extensive changes in drilling practice and the

increasing use of jigs and fixtures of various types on different

| classes of machine tools. Therefore, the book referred to has

been replaced by two volumes, of which this is one. The other book, "Modern Drilling Practice," is already well known to

}*• many designers, shop foremen, and machinists interested in

the latest types of drilling machines and their use.

This new book, "Jig and Fixture Design," contains that part of the volume on "Drilling Practice and Jig Design" which

>^ dealt with jigs and fixtures. This material was used because it

*l is a treatise on the principles of jig and fixture design which

contains information that is indispensable in a book of this